

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Kenneth Berner on 27 August 2009.

The application has been amended as follows:

10. An image pickup device comprising:

a sensor means and an optical means through which the device receives light radiation in an object field and directs it toward the sensor means,

wherein the optical means comprise at least one mirror and a plurality of entry pupils, each said entry pupil for observing a distinct part of the object field,

wherein the height of the optical means is less than the focal length for the entry pupils,

wherein the light radiation to be observed by each said pupil is reflected by one of the at least one mirror toward a separated part of the sensor means by the optical means.

12. The device as claimed in claim 10, wherein each part of the object field is associated with a useful part of an image plane formed on the sensor means by the optical means, and in that the various useful parts are separated by a space.

13. The device as claimed in claim 12, wherein the sensor means is produced on a substrate, and wherein signal processing means are produced in the space on the substrate.

14. The device as claimed in claim 10, wherein each part of the object field is associated with a useful part of an image plane formed on the sensor means by the optical means, and wherein the entry pupils have a geometry similar to that of the useful parts.

18. The device as claimed in claim ~~40~~ 15, wherein the light radiation observed by each pupil is constantly directed toward a separate part of the sensor means by the optical means.

19. An image pickup device comprising:

a sensor means and an optical means through which the device receives light radiation in an object field and directs it toward the sensor means,

wherein the optical means comprise at least one mirror and a plurality of entry pupils, each said entry pupil for observing a distinct part of the object field,

wherein the light radiation to be observed by each said pupil is directed toward a separated part of the sensor means by the optical means,

wherein the optical means are produced in a single transparent piece.

2. Claims 10-19 are allowed.
3. The following is an examiner's statement of reasons for allowance: The primary reason for the allowance of Claims 10-18 is the Claim 10 limitation for the optical means to be smaller in height than the focal length of the entry pupils. The prior art of record neither teaches nor suggests this limitation.
4. Inoue et al., U.S. Patent No. 7,098,953 (Inoue), teaches a stereoscopic imaging device with four entry pupils (Fig. 15) with an imaging sensor separated into four distinct areas (Fig. 2). Inoue teaches that it is desirable to miniaturize the device while maintaining a wide field of view for applications such as installation in portable information terminals or cellular (mobile) telephones. However, Inoue does not teach or suggest that it is desirable to reduce the height of the device to less than the focal length of the entry pupils.
5. The primary reason for the allowance of Claim 19 is the limitation for the formation of the optical means, including at least one mirror and a plurality of pupil entry means, as a single transparent piece, in combination with all other claim limitations in total. The prior art of record teaches these components as separate pieces and there is no indication of a means or desire to make them in one continuous piece.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to AUTUMN PARKER whose telephone number is (571)270-3916. The examiner can normally be reached on Mon-Thurs, 8:00 am - 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Assouad can be reached on (571) 272-2210. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AP
10 Sept 2009

/Melissa J Koval/
for Patrick J. Assouad, Examiner of Art Unit 2862